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# Vascular Disease

## IS THERE A SMOKING GUN? THE IMPACT OF TOBACCO USE ON PERIPHERAL VASCULAR INTERVENTION INDICATIONS AND OUTCOMES; OBSERVATIONS FROM BLUE CROSS BLUE SHIELD OF MICHIGAN CARDIOVASCULAR CONSORTIUM

ACC Oral Contributions
McCormick Place South, S504a
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Session Title: New Insights in Perpheral Vascular Disease and Year in Review
Abstract Category: 35. Peripheral Arterial/Carotid Disease/Aortic Disease
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**Background:** Peripheral arterial disease (PAD) is a significant problem in the U.S., and smoking is a known risk factor for PAD. Little is known regarding the impact of smoking status and peripheral vascular intervention (PVI) outcomes. The purpose of this study was to evaluate the impact of smoking status on peri-procedural characteristics, and in-hospital outcomes of patients undergoing PVI procedures.

**Methods:** Between 01/2004 through 12/2010, data was recorded in a in a regional, contemporary, multi-center, multi-disciplinary registry on a total of 18,386 PVI's. Groups were classified as non-smokers, former smokers (those who quit at least one month prior to intervention), and current smokers.

**Results:** Patient demographics, co-morbitities, presenting symptoms, arterial bed treated and PVI outcome based on smoking status are shown (see table). Multivariate analysis, however, revealed that smoking status was not independently associated with the need for transfusion or amputation.

**Conclusions:** In this study of patients presenting for PVI, active smokers were younger, had fewer other co-morbidities, and were more likely to have claudication and undergo aorto-iliac intervention. Active smoking was not associated with more peri-procedural complications or decreased technical or procedural success.

Peripheral Vascular Intervention Demographics, Symptoms, and Outcomes Based on Smoking Status

| | Current Smokers (n= 6095) | Former Smokers (n= 8700) | Non-smokers (n= 3591) | p-value |
|---|---|---|---|---|
| Age (SD) | 62.3 (10.1) | 70.1 (10.2) | 73.7 (11.9) | <0.0001 |
| Female | 2253 (37%) | 3231 (37%) | 2171 (60%) | <0.0001 |
| Diabetes | 2261 (37%) | 4378 (50%) | 2104 (59%) | <0.0001 |
| Claudication | 3784 (62%) | 5228 (60%) | 1647 (46%) | <0.0001 |
| Limb ischemia | 2191 (36%) | 3326 (38%) | 1864 (52%) | <0.0001 |
| Aorto-iliac | 2611 (43%) | 2726 (31%) | 486 (14%) | <0.0001 |
| Below-the-knee | 1001 (16%) | 2131 (25%) | 1632 (46%) | <0.0001 |
| MACE (Death, MI, CVA/TIA) | 59 (0.9%) | 115 (1.3%) | 42 (1.2%) | 0.10 |
| Transfusion | 347 (6%) | 645 (7%) | 300 (8%) | 0.90 |